

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. – 39. (Cancelled)

40. (New) An article of footwear comprising:
an upper;
a sole having a ground engaging portion and an energy return system between the upper and the sole;
the energy return system comprising:
an upper plate and a lower plate spaced a predetermined distance from each other, the upper and lower plates having heel, arch, and toe portions, respectively, and made from an elastic material of high tensile strength, the plates independently deformable and recoverable from heel portion to toe portion;
and
two elastomeric elements, one disposed between the toe portion of the plates and the other disposed between the heel portion of the plates to maintain the spacing between said plates during a gait cycle of a wearer comprising a heel strike, a midstance, and a toe off;
during heel strike the heel portion of the upper plate deformable downward and the arch portion of the upper plate deformable upward;
during midstance the arch portion of both the upper and lower plates deformable downward and the heel portion of the upper plate recoverable to a non-deformable state rocking the wearer forward; and
during toe off the upper and lower plates recoverable to the non-deformable state releasing stored energy into a step forward and upward propelling the wearer forward.

41. (New) The article of footwear of claim 40, wherein the upper plate has a lateral side and a medial side, and wherein during heel strike the heel portion of the upper plate has greater deformation on the lateral side than the medial side.

42. (New) The article of footwear of claim 41, wherein during midstance the arch portion of the upper plate has greater deformation on the lateral side than the medial side.

43. (New) The article of footwear of claim 42, wherein during toe off the deformation of the toe portion of the upper plate shifts from the lateral side to the medial side.

44. (New) The article of footwear of claim 40, wherein one of the two elastomeric elements is positioned at a posterior end of the upper and lower plates.

45. (New) The article of footwear of claim 40, wherein said upper and lower plates comprise a material having a modulus of elasticity of at least approximately $32 \times 10^6 \text{ lb/in}^2$.

46. (New) The article of footwear of claim 45, wherein said material comprises carbon graphite.

47. (New) The article of footwear of claim 46, wherein said upper plate and lower plates are formed by a plurality of layers of carbon graphite.

48. (New) The article of footwear of claim 40, wherein said first one of said separating elements is generally arcuate.

49. (New) The article of footwear of claim 40, wherein one of the separating elements is located entirely forward of a ball of a wearer's foot.

50. (New) The article of footwear of claim 40, wherein the toe portion of the upper plate deflects downward before the upper and lower plates return to the non-deformable state.

51. (New) An energy return system for use in a shoe sole comprising:
an upper plate and a lower plate spaced a predetermined distance from each other, the upper and lower plates having heel, arch, and toe portions, respectively and made from an elastic material of high tensile strength, the plates independently deformable and recoverable from heel portion to toe portion;
two elastomeric elements, one disposed between the toe portion of the plates and the other disposed between the heel portion of the plates to maintain the spacing between said plates during a gait cycle of a wearer comprising a heel strike, a midstance, and a toe off wherein;
during heel strike the heel portion of the upper plate deformable downward and the arch portion of the upper plate deformable upward;
during midstance the arch portion of both the upper and lower plates deformable downward and the heel portion of the upper plate recoverable to a non-deformable state rocking the wearer forward; and
during toe off the upper and lower plates recoverable to the non-deformable state releasing stored energy into a step forward and upward propelling the wearer forward.

52. (New) The article of footwear of claim 51, wherein the upper plate has a lateral side and a medial side, and wherein during heel strike the heel portion of the upper plate has greater deformation on a lateral side than a medial side.

53. (New) The article of footwear of claim 52, wherein during midstance the arch portion of the upper plate has greater deformation on the lateral side than the medial side.

54. (New) The article of footwear of claim 53, wherein during toe off the deformation of the toe portion of the upper plate shifts from the lateral side to the medial side.

55. (New) The article of footwear of claim 51, wherein one of the two elastomeric elements is positioned at a posterior end of the upper and lower plates.

56. (New) The energy return system of claim 51, wherein said upper and lower plates comprise a material having a modulus of elasticity of at least approximately $32 \times 10^6 \text{ lb/in}^2$.

57. (New) The energy return system of claim 56, wherein said material comprises carbon graphite.

58. (New) The energy return system of claim 57, wherein said upper plate and lower plates are formed by a plurality of layers of carbon graphite.

59. (New) The energy return system of claim 51, wherein said first one of said separating elements is generally arcuate.

60. (New) The energy return system of claim 51, wherein one of the separating elements is located entirely forward of a ball of a wearer's foot.

61. (New) The energy return system of claim 51, wherein the toe portion of the upper plate deflects downward before the upper and lower plates return to the non-deformable state.

62. (New) An article of footwear comprising:
an upper;
a sole having a ground engaging portion and an energy return system between the upper and the sole;
the energy return system comprising:

an upper plate and a lower plate spaced a predetermined distance from each plate, the plates having arch and toe portions, respectively, the upper and lower plates made from an elastic material of high tensile strength, the plates independently deformable and recoverable from arch portion to toe portion; and

two elastomeric elements, one disposed between the toe portion of the plates and the other disposed between the arch portion of the plates to maintain the spacing between said plates during a gait cycle of a wearer comprising a toe strike and a toe off wherein;

during toe strike the toe portion of both the upper and lower plates are deformable upward; and

during toe off, the upper and lower plates recoverable to the non-deformable state releasing stored energy into a step forward and upward propelling the wearer forward.

63. (New) The article of footwear of claim 62, wherein the upper plate has a lateral side and a medial, and wherein during toe off the deformation of the toe portion of the upper plate shifts from the lateral side to the medial side.

64. (New) The article of footwear of claim 62, wherein one of the two elastomeric elements is positioned at a posterior end of the upper and lower plates.

65. (New) The article of footwear of claim 62, wherein said upper and lower plates comprise a material having a modulus of elasticity of at least approximately 32 x 10⁶ lb/in².

66. (New) The article of footwear of claim 65, wherein said material comprises carbon graphite.

67. (New) The article of footwear of claim 66, wherein said upper plate and lower plates are formed by a plurality of layers of carbon graphite.

68. (New) The article of footwear of claim 62, wherein said first one of said separating elements is generally arcuate.

69. (New) The article of footwear of claim 62, wherein one of the separating elements is located entirely forward of a ball of a wearer's foot.

70. (New) The article of footwear of claim 62, wherein the toe portion of the upper plate deflects downward before the upper and lower plates return to the non-deformable state.